CULTURAL RESOURCE SURVEY AND TEST FOR THE IMPROVEMENT PLAN FOR TPM 17341 AND GRADING PLAN L-15684, SANTA FE HILLS, SAN DIEGO COUNTY, CALIFORNIA (APNs 267-145-09 to 12, 267-146-05, and 267-146-08)

Project Common Name:
TPM 17341 and L-15684

Permit Numbers/PDS Environmental Log No:
PDS2012-2700-15684

Lead Agency:
County of San Diego
Planning & Development Services
Contact: Lee Shick
5510 Overland Avenue
San Diego, CA 92123

Preparer:
Andrew R. Pigniolo

Laguna Mountain Environmental, Inc.
7969 Engineer Road, Suite 208
San Diego, CA 92111
(858) 505-8164

Andrew R. Pigniolo
Signature

Project Proponent:
Mr. Richard Bagley
28967 Palos Verdes Drive East
Rancho Palos Verdes, CA 90275

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National Archaeological Data Base Information

Author: Andrew R. Pigniolo

Firm: Laguna Mountain Environmental, Inc.

Client/Project Proponent: Mr. Richard Bagley

Report Date: April 2013

Report Title: Cultural Resource Survey and Test
for the Improvement Plan for TPM 17341 and Grading Plan L-15684,
Santa Fe Hills, San Diego County, California

Type of Study: Cultural Resource Survey and Test

New Sites: CA-SDI-20780

Updated Sites: None

USGS Quadrangle: Rancho Santa Fe 7.5'

Acreage: 15.6 Acres

Permit Numbers: PDS2012-2700-15684

Key Words: County of San Diego, Santa Fe Hills, Positive Survey, Bedrock Milling,
site CA-SDI-20780

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LIST OF ACRONYMS AND ABBREVIATIONS

APE (Area of Potential Effects)
ARMR (Archaeological Resource Management Report)
California Register (California Register of Historic Resources)
CEQA (California Environmental Quality Act)
cm (centimeter)
CRM (Cultural Resource Management)
EIR (Environmental Impact Report)
Laguna Mountain (Laguna Mountain Environmental, Inc.)
Local Register (San Diego County Local Register of Historic Resources)
m (meter)
MOU (Memorandum of Understanding)
MUP (Major Use Permit)
NEPA (National Environmental Policy Act)
NHPA (National Historic Preservation Act)
RPO (Resource Protection Ordinance)
SCIC (South Coastal Information Center)
SDI (San Diego County trinomial prefix)
SDM (San Diego Museum of Man)

EXECUTIVE SUMMARY

Laguna Mountain Environmental, Inc. (Laguna Mountain) conducted an archaeological survey of six parcels totaling 15.6 acres for the proposed Improvement Plan for TPM 17341 and Grading Plan L-15684 Project. The investigation included a records search, literature review, examination of historic maps, and an archaeological field inventory of the property. A single site CA-SDI-20780 was identified within the project impact area during the survey. A testing program was conducted to evaluate the significance and recover information from site CA-SDI-20780.

Cultural resource work was conducted in accordance with the California Environmental Quality Act (CEQA) and the County of San Diego implementing regulations and guidelines including the County of San Diego Resource Protection Ordinance (RPO). The County of San Diego will serve as lead agency for the project and CEQA compliance.

A records search completed at the South Coastal Information Center indicated that the project area has not been previously surveyed. At least 27 previous studies have been conducted within a one-mile radius of the project. No cultural resources have been previously recorded within the project area but 39 cultural resources have been previously recorded within a one-mile radius of the project.

The survey of the project area was conducted on November 29, 2012 by Mr. Andrew R. Pigniolo, RPA. Mr. Justin Linton of Red Tail Monitoring & Research, Inc. served as Native American Monitor. The project was surveyed on foot in 10 to 15 m transect intervals. The project area contains coastal sage scrub vegetation, but also non-native grasses and chamise chaparral. Portions of the project have been grazed and had approximately 90 percent visibility while other portions of the project had approximately 60 percent visibility. Surface visibility averaged approximately 75 percent over most of the property, but rodent burrows and other clearings provided visibility in grass covered areas. The cultural resources survey of the project adequately served to identify cultural resources.

One archaeological site was identified within the project area. Site CA-SDI-20780 consists of a small bedrock milling station with no associated surface artifacts. This site has not been evaluated for the California Register of Historical Resources (California Register) eligibility or significance under RPO. Based on the current County guidelines, this resource qualifies as significant for its information potential.

Project plans indicate this site will be impacted by proposed development. Because CA-SDI-20780 could not be avoided and incorporated into an open-space easement, significance testing was recommended to establish if subsurface cultural material is present. Testing was conducted on March 26, 2013 by Andrew R. Pigniolo and Jose "Pepe" Aguilar. Mr. Bobo Linton served as Native American Monitor. Testing included documentation of the bedrock milling features and the excavation of five shovel test pits (STPs) within and around the site area. No surface or subsurface cultural material was recovered during testing.

CA-SDI-20780 is not recommended as eligible for nomination to the California Register, CEQA, or the County RPO. Documentation of the site during testing has recovered the information contained in this resource. The potential for buried cultural resources is low based on the shallow soils of the area and survey results.

1.0 INTRODUCTION

1.1 Project Description

1.1.1 Project Summary

The 15.6-acre project area is located in the central western portion of San Diego County within the Santa Fe Hills area, east of Rancho Santa Fe (Figure 1). It is located approximately one half mile southeast of the San Dieguito River and north of La Jolla Valley. The project area consists of six parcels (APN# 267-145-09 to 12, 267-146-05, and 267-146-08) that are located on both the north and south sides of Artesian Road, and west of Rio Vista Road. The project is located in Section 26, Township 13 South, Range 3 West as shown on the Rancho Santa Fe USGS 7.5' Quadrangle (Figure 2).

The proposed project is for the residential development of the six parcels. As part of the project, development including building pads, an access road, parking areas, and utilities would be graded and excavated. The project consists of the grading of seven pads on the six lots (Figure 3). The project does not include off-site project impacts.

The archaeological survey and testing program was conducted pursuant to the California Environmental Quality Act (CEQA), and respective County of San Diego implementing regulations and guidelines including the Resource Protection Ordinance (RPO). The County of San Diego will serve as lead agency for CEQA compliance. The archaeological survey was conducted to determine if any cultural resources eligible for inclusion in the California Register of Historic Resources (California Register) or significant under the Resource Protection Ordinance (RPO) will be affected by this project. The testing program was conducted to evaluate the importance of site CA-SDI-20780 and recover the information contained in this resource.

1.1.2 Project Personnel

The cultural resource inventory was conducted by Laguna Mountain Environmental, Inc. (Laguna Mountain), whose cultural resources staff meets state and local requirements. Mr. Andrew R. Pigniolo served as Principal Investigator for the project. Mr. Pigniolo is a member of the Register of Professional Archaeologists (RPA; previously called SOPA) and meets the Secretary of the Interior's standards for qualified archaeologists. He is also on the County of San Diego's list of approved consultants. Mr. Pigniolo has an M.A. degree in Anthropology from San Diego State University and has extensive experience in the San Diego region. His resume is included in Appendix A. Mr. Justin Linton of Red Tail Monitoring & Research, Inc. served as Native American Monitor for the project.

The testing program was conducted by Andrew R. Pigniolo and Mr. Jose "Pepe" Aguilar. Mr. Aguilar has an M.A. in Anthropology from San Diego State University, and has 11 years of archaeological experience in the southern California region, and six years in Oaxaca, Mexico. Mr. Bobo Linton of Red Tail Monitoring & Research, Inc. served as Native American Monitor for the testing phase of the project.

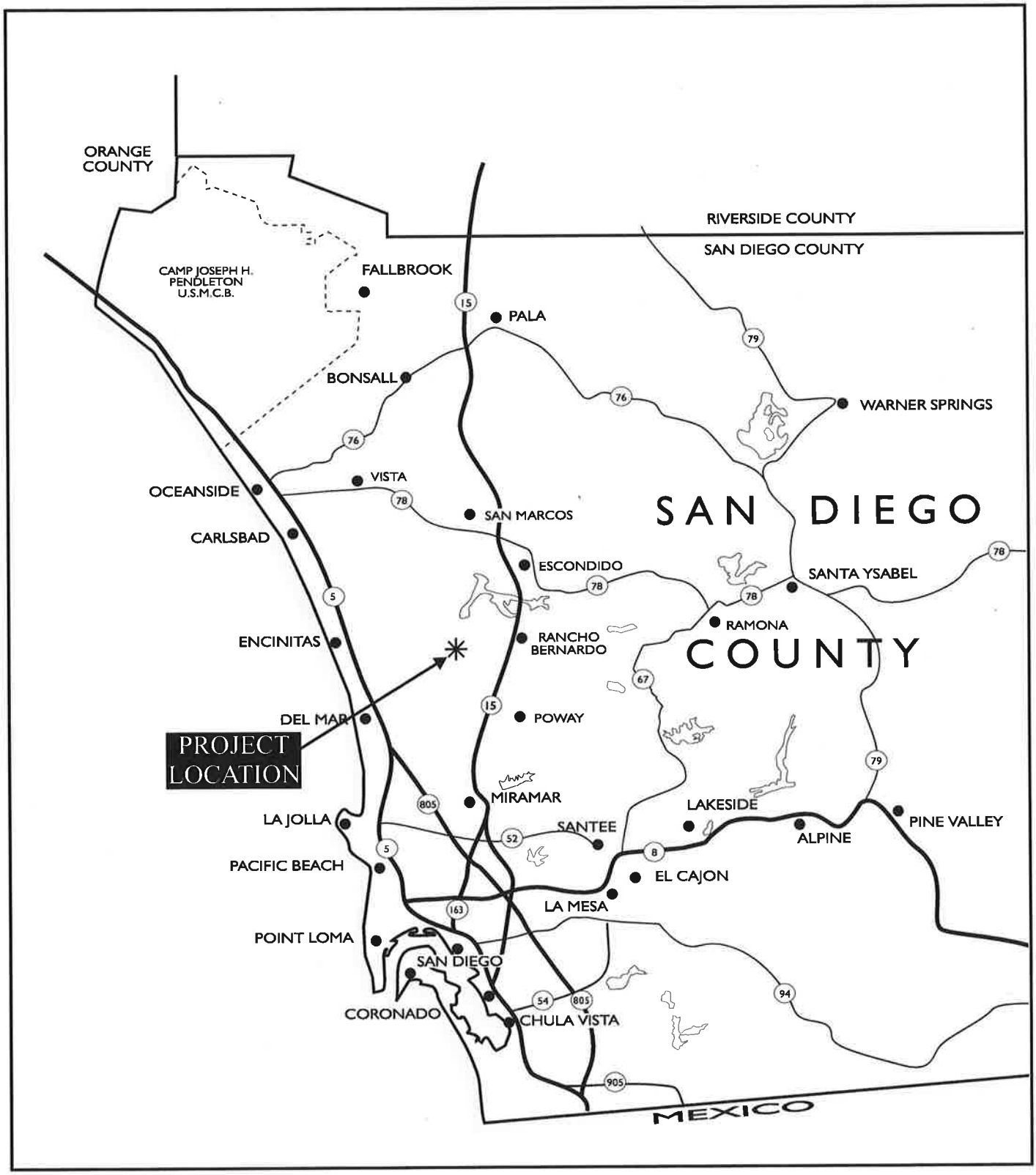
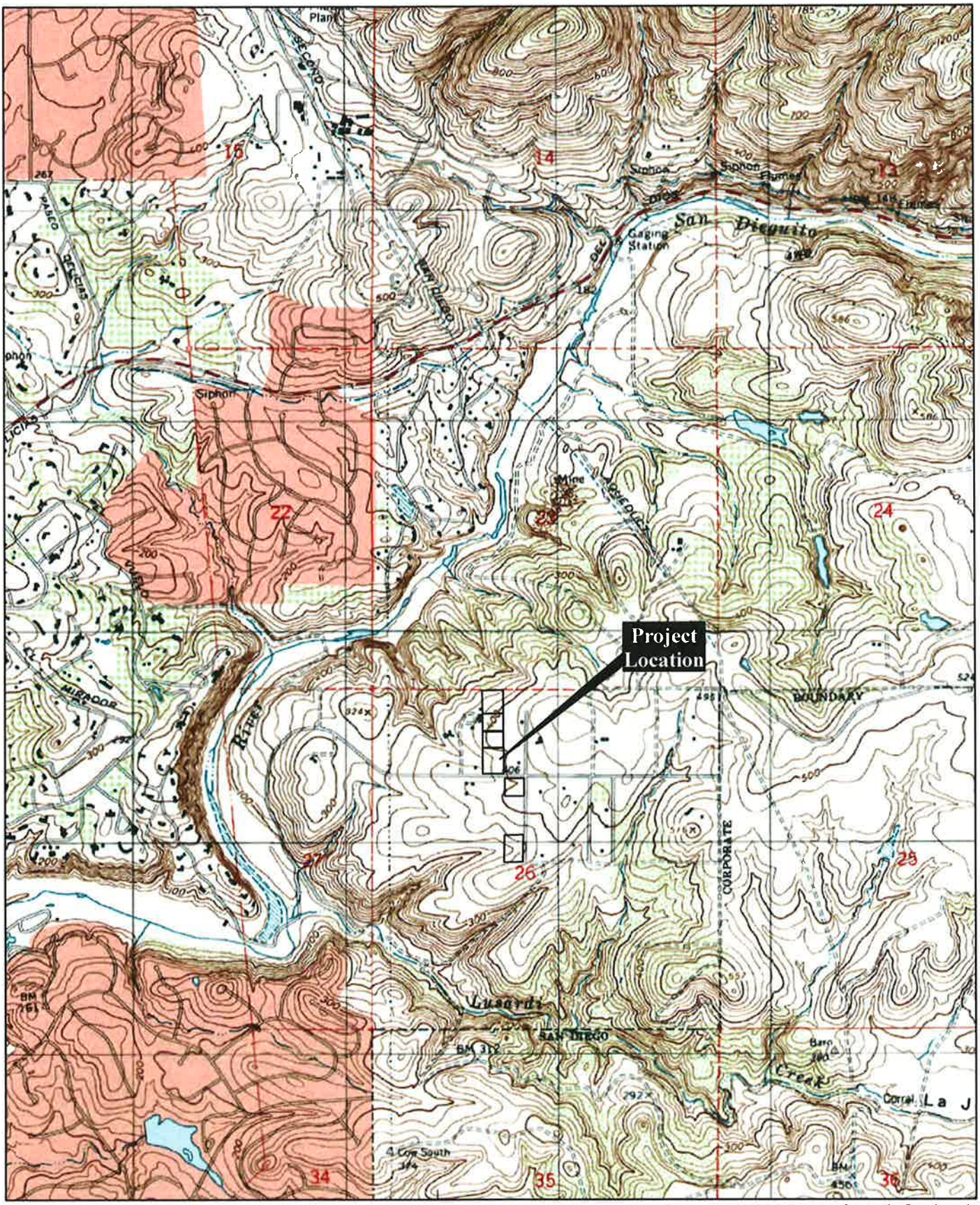


Figure 1
Regional Location Map

Laguna Mountain Environmental, Inc.

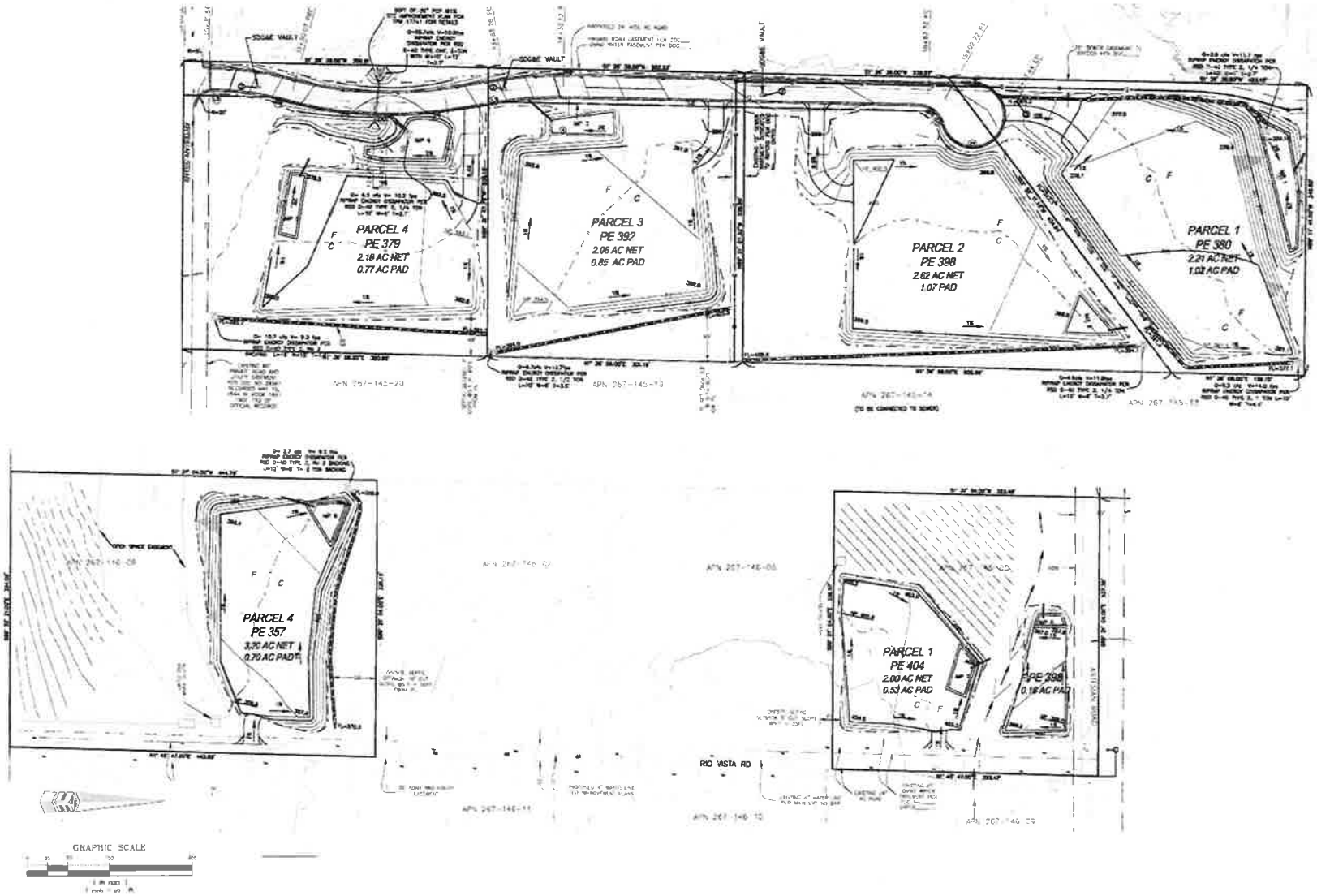


Source: 7.5' USGS Rancho Santa Fe Quadrangle

Figure 2
Project Location

0 1,000 2,000 Feet

Laguna Mountain Environmental, Inc.



SOURCE: San Dieguito Engineering Lot Grading Plan (11/12/2012)

Figure 3
Project Plan

1.1.3 Structure of the Report

This report follows the County of San Diego Report Format and Content Requirements for cultural resources, which is a modified version of the Archaeological Resource Management Report (ARMR) Guidelines (County of San Diego 2007). The report introduction provides a description of the project and background on the project area, as well as any previous research. Section 2 describes the guidelines for determining archaeological significance. Section 3 describes the research design, while Section 4 describes the survey and testing methods. The inventory results includes a description of the site along with the testing results are included in Section 4. Section 5 provides the interpretation of any identified resources and impacts to those resources, and Section 6 includes a discussion of mitigation measures and recommendations for the project.

1.2 Existing Conditions

The following environmental and cultural background provides a context for the cultural resource inventory.

1.2.1 Environmental Setting

The project area is located in the central western portion of San Diego County within the foothills and interior valleys of the region. The property is located in the Santa Fe Hills area north of La Jolla Valley and approximately one half mile southeast of the San Dieguito River. The property includes a portion of a ridgeline, gentle slopes, and two very small seasonal drainages. Elevations range from 330 to 410 feet above mean sea level. The property is currently undeveloped. Portions of the northern four parcels are being used as a horse corral and for grazing. Surface scrapes on rocks suggest that portions of these same parcels may have been brushed in the past and underground utilities are present along the west side of the parcels. The southern-most parcel also appears to show evidence of past brushing in the form of small bulldozer berms, but disturbance appears to have been minimal.

The geomorphology of the project area is largely a product of the region's geologic history. During the Jurassic and late Cretaceous (>100 million years ago) a series of volcanic islands paralleled the current coastline in the San Diego region. The remnants of these islands stand as Mount Helix, Black Mountain, and the Jamul Mountains among others. This island arc of volcanos spewed out vast layers of tuff (volcanic ash) and breccia that have since been metamorphosed into hard rock of the Santiago Peak Volcanic formation. These fine-grained rocks provided a regionally important resource for Native American flaked stone tools. Significant sources of high quality Santiago Peak Volcanic material are present to the north of the project in the Rancho Cielo area.

At about the same time, a granitic and gabbroic batholith was being formed under and east of these volcanoes. This batholith was uplifted and forms the granitic rocks and outcrops of the Peninsular Range and the foothills to the east. In San Diego County the large and varied crystals of these granitic rocks provided particularly good abrasive surfaces for Native American seed processing. These outcrops were frequently used for bedrock milling of seeds. The batholith contains numerous pegmatite dikes. This was a good source of quartz, a material used by Native Americans for flaked stone tools and ceremonial purposes.

As the Peninsular Batholith rose, it warped and metamorphosed the overlying sediments, forming the Julian Schist (Remeika and Lindsay 1992). This formation contains quartzite, a material also used for Native American flaked stone tools and common within the project area. Its relatively poor flaking qualities made this quartzite less popular for tool making than the quartz and Santiago Peak materials.

Also as the Peninsular Batholith rose, major river channels developed. The Lusardi Formation represents an upper Cretaceous age cobble and boulder conglomerate with occasional thin lenses of medium-grained sandstone. Cobbles and boulders include both Santiago Peak Volcanic rocks and granitic rocks. The project area is underlain by this formation and sparse boulders and cobble of both these rock types were observed within the project area (Kennedy and Tan 2005). For the most part, the quality of the Santiago Peak Volcanics within the project area was coarse with many examples of volcanic breccia and limited material suitable for flaked lithic artifacts.

The soils within the project area are dominated by Huerhuero loam (Bowman 1973). The Huerhuero series soils consist of moderately well drained loams that have a clay subsoil. These soils developed in sandy marine sediments. In a representative profile the surface layer is brown and pale-brown, strongly acid and medium acid loam about 12 inches thick. The upper part of the subsoil is brown, moderately alkaline clay. It extends to a depth of about 41 inches. Below this, and extending to a depth of more than 60 inches, is brown, mildly alkaline clay loam and sandy loam (Bowman 1973).

Soils on the southern-most parcel include Olivenhain cobbly loam (Bowman 1973). The Olivenhain series soils consist of well-drained, moderately deep to deep cobbly loams that have a very cobbly clay subsoil. These soils formed in old gravelly and cobbly alluvium. They are on dissected marine terraces (Bowman 1973). In a representative profile the surface layer is brown and reddish-brown, medium acid cobbly loam about 10 inches thick. The subsoil is reddish-brown, red, and pink, strongly acid very cobbly clay and clay loam about 32 inches thick. The substratum is pinkish-white, strongly acid cobbly loam (Bowman 1973).

The San Dieguito River is approximately one half mile northwest of the project area and Lusardi Creek is about the same distance to the south. Small ephemeral seasonal drainages are present in the southern two parcels and west of the four northern parcels. These drainages could have provided seasonal water sources for Native Americans using the area.

The climate of the region can generally be described as Mediterranean, with cool, wet winters and hot, dry summers. Rainfall limits vegetation growth. Habitat types adapted to the dry conditions of the region occur in the project area. The project area has both coastal sage scrub and chamise chaparral vegetation. Components of these communities provided important resources to Native Americans in the region. Sage seed, yucca, buckwheat, acorns, and native grasses formed important food resources to Late Prehistoric Native Americans.

Animal resources in the region include deer, fox, raccoon, skunk, bobcats, coyotes, rabbits, and various rodent, reptile, and bird species. Small game, dominated by rabbits, is relatively abundant.

1.1.2. Cultural Setting

Prehistoric Period

Paleoindian Period

The earliest well documented prehistoric sites in southern California are identified as belonging to the Paleoindian period, which has locally been termed the San Dieguito complex/tradition. The Paleoindian period is thought to have occurred between 9,000 years ago, or earlier, and 8,000 years ago in this region. Although varying from the well-defined fluted point complexes such as Clovis, the San Dieguito complex is still seen as a hunting focused economy with limited use of seed grinding technology. The economy is generally seen to focus on highly ranked resources such as large mammals and relatively high mobility which may be related to following large game. Archaeological evidence associated with this period has been found around inland dry lakes, on old terrace deposits of the California desert, and also near the coast where it was first documented at the Harris Site.

Archaic Period

Native Americans during the Archaic period had a generalized economy that focused on hunting and gathering. In many parts of North America, Native Americans chose to replace this economy with types based on horticulture and agriculture. Coastal southern California economies remained largely based on wild resource use until European contact (Willey and Phillips 1958). Changes in hunting technology and other important elements of material culture have created two distinct subdivisions within the Archaic period in southern California.

The Early Archaic period is differentiated from the earlier Paleoindian period by a shift to a more generalized economy and an increased focus on the use of grinding and seed processing technology. At sites dated between approximately 8,000 and 1,500 years before present (B.P.), the increased use of groundstone artifacts and atlatl dart points, along with a mixed core-based tool assemblage, identify a range of adaptations to a more diversified set of plant and animal resources. Variations of the Pinto and Elko series projectile points, large bifaces, manos and portable metates, core tools, and heavy use of marine invertebrates in coastal areas are characteristic of this period, but many coastal sites show limited use of diagnostic atlatl points. Major changes in technology within this relatively long chronological unit appear limited. Several scientists have considered changes in projectile point styles and artifact frequencies within the Early Archaic period to be indicative of population movements or units of cultural change (Moratto 1984), but these units are poorly defined locally due to poor site preservation.

Late Prehistoric Period

Around 2,000 B.P., Yuman-speaking people from the eastern Colorado River region began migrating into southern California, representing what is called the Late Prehistoric Period. The Late Prehistoric Period in San Diego County is recognized archaeologically by smaller projectile points, the replacement of flexed inhumations with cremation, the introduction of ceramics, and an emphasis on inland plant food collection and processing, especially acorns (True 1966). Inland semi-sedentary villages were established along major water courses, and montane areas were seasonally occupied to exploit acorns and piñon nuts, resulting in permanent milling

features on bedrock outcrops. Mortars for acorn processing increased in frequency relative to seed grinding basins. This period is known archaeologically in southern San Diego County as the Yuman (Rogers 1945) or the Cuyamaca Complex (True 1970).

The Kumeyaay (formerly referred to as Diegueño) who inhabited the southern region of San Diego County, western and central Imperial County, and northern Baja California (Almstedt 1982; Gifford 1931; Hedges 1975; Luomala 1976; Shipek 1982; Spier 1923) are the direct descendants of the early Yuman hunter-gatherers. Kumeyaay territory encompassed a large and diverse environment which included marine, foothill, mountain, and desert resource zones. Their language is a dialect of the Yuman language which is related to the large Hokan super family.

There seems to have been considerable variability in the level of social organization and settlement variance. The Kumeyaay were organized by patrilineal, patrilocal lineages that claimed prescribed territories, but did not own the resources except for some minor plants and eagle aeries (Luomala 1976; Spier 1923). Some lineages occupied procurement ranges that required considerable residential mobility, such as those in the deserts (Hicks 1963). In the mountains, some of the larger groups occupied a few large residential bases that would be occupied biannually, such as those occupied in Cuyamaca in the summer and fall, and in Guatay or Descanso during the rest of the year (Almstedt 1982; Rensch 1975). According to Spier (1923), many Eastern Kumeyaay spent the period of time from spring through autumn in larger residential bases in the upland procurement ranges, and wintered in mixed groups in residential bases along the eastern foothills on the edge of the desert (i.e., Jacumba and Mountain Springs). This variability in settlement mobility and organization reflects the great range of environments in the territory.

Acorns were the single most important food source used by the Kumeyaay. Their villages were usually located near water, which was necessary for leaching acorn meal. Other storable resources such as mesquite or agave were equally valuable to groups inhabiting desert areas, at least during certain seasons (Hicks 1963; Shackley 1984). Seeds from grasses, manzanita, sage, sunflowers, lemonadeberry, chia, and other plants were also used along with various wild greens and fruits. Deer, small game, and birds were hunted and fish and marine foods were eaten. Houses were arranged in the village without apparent pattern. The houses in primary villages were conical structures covered with tule bundles, having excavated floors and central hearths. Houses constructed at the mountain camps generally lacked any excavation, probably due to the summer occupation. Other structures included sweathouses, ceremonial enclosures, ramadas and acorn granaries. The material culture included ceramic cooking and storage vessels, baskets, flaked lithic and ground stone tools, arrow shaft straighteners, stone, bone, and shell ornaments.

Hunting implements included the bow and arrow, curved throwing sticks, nets and snares. Shell and bone fishhooks, as well as nets, were used for fishing. Lithic materials including quartz and metavolcanics were commonly available throughout much of the Kumeyaay territory. Other lithic resources, such as obsidian, chert, chalcedony, and steatite, occur in more localized areas and were acquired through direct procurement or exchange. Projectile points including the Cottonwood Series points and Desert Side-notched points were commonly produced.

Kumeyaay culture and society remained stable until the advent of missionization and displacement by Hispanic populations during the eighteenth century. The effects of missionization, along with the introduction of European diseases, greatly reduced the native

population of southern California. By the early 1820s, California was under Mexico's rule. The establishment of ranchos under the Mexican land grant program further disrupted the way of life of the native inhabitants.

Ethnohistoric Period

The Ethnohistoric period refers to a brief period when Native American culture was initially being affected by Euroamerican culture and historical records on Native American activities were limited. When the Spanish colonists began to settle California, the project area was within the territory of a loosely integrated cultural group historically known as the Kumeyaay or Northern and Southern Diegueño because of their association with the San Diego Mission. The Kumeyaay as a whole speak a Yuman language which differentiates them from the Luiseño to the north, who speak a Takic language (Kroeber 1976). Both of these groups were hunter-gatherers with highly developed social systems. European contact introduced diseases that dramatically reduced the Native American population and helped to break down cultural institutions. The transition to a largely Euroamerican lifestyle occurred relatively rapidly in the nineteenth century.

Historic Period

Cultural activities within San Diego County between the late 1700s and the present provide a record of Native American, Spanish, Mexican, and American control, occupation, and land use. An abbreviated history of San Diego County is presented for the purpose of providing a background on the presence, chronological significance, and historical relationship of cultural resources within the county.

Native American control of the southern California region ended in the political views of western nations with Spanish colonization of the area beginning in 1769. De facto Native American control of the majority of the population of California did not end until several decades later. In southern California, Euroamerican control was firmly established by the end of the Garra uprising in the early 1850s (Phillips 1975).

Spanish

The Spanish Period (1769-1821) represents a period of Euroamerican exploration and settlement. Dual military and religious contingents established the San Diego Presidio and the San Diego and San Luis Rey Missions. The Mission system used Native Americans to build a footing for greater European settlement. The Mission system also introduced horses, cattle, other agricultural goods and implements; and provided construction methods and new architectural styles. The cultural and institutional systems established by the Spanish continued beyond the year 1821, when California came under Mexican rule.

Mexican

The Mexican Period (1821-1848) includes the retention of many Spanish institutions and laws. The mission system was secularized in 1834, which dispossessed many Native Americans and increased Mexican settlement. After secularization, large tracts of land were granted to individuals and families and the rancho system was established. Cattle ranching dominated other

agricultural activities and the development of the hide and tallow trade with the United States increased during the early part of this period. The Pueblo of San Diego was established during this period and Native American influence and control greatly declined. The Mexican Period ended when Mexico ceded California to the United States after the Mexican-American War of 1846-48.

American

Soon after American control was established (1848-present), gold was discovered in California. The tremendous influx of American and Europeans that resulted quickly drowned out much of the Spanish and Mexican cultural influences and eliminated the last vestiges of de facto Native American control. Few Mexican ranchos remained intact because of land claim disputes and the homestead system increased American settlement beyond the coastal plain.

1.2.3 Record Search Results

Archival research consisted of a literature and site record search at a local archaeological repository, in addition to an examination of historic maps, and historic site inventories. This information was used to identify any previously recorded resources and determine the types of resources that might occur in the survey area.

The records and literature search was conducted at the South Coastal Information Center (SCIC) at San Diego State University. The records search included a one-mile radius of the project area to provide background on the types of sites that would be expected in the region (Appendix C). Copies of historic maps were provided by the South Coastal Information Center.

At least 27 archaeological investigations have been documented in the vicinity of the project (Table 1). Most of these have been survey projects related to residential development. These studies indicate there was a variety of prehistoric and historic activity in the area. The records search indicated that the project area has not been previously surveyed.

Thirty-nine archaeological sites have been identified through previous research within a one-mile radius of the project. Table 2 provides a summary of the types of sites present in the area. Most of these sites are prehistoric and include bedrock milling and lithic scatter sites. This is a reflection of a large amount of prehistoric activity in the area. Historic sites are also present in the area.

Historic research included an examination of a variety of resources. The current listings of the National Register of Historic Places were checked through the National Register of Historic Places website. The California Inventory of Historic Resources (State of California 1976) and the California Historical Landmarks (State of California 1992) were also checked for historic resources. Historic map research indicated that the project area has not been developed in the past.

Table 1. Archaeological Investigations within a One-Mile Radius of the Project Area

Author	Report Title	Year
APEC	Environmental Impact Report for San Dieguito River Study Draft Conceptual Master Plan	1981
Bissell	Report on Archaeological Reconnaissance of a 26-Acre Parcel Near Rancho Santa Fe, San Diego County	1986
Carrico and Ezell	Archaeological Mapping and Testing of Harris and Adjacent Cultural Resources, Rancho Santa Fe Area, San Diego County	1978
Carrico, Cooley and Clevenger	Archaeological Excavations at the Harris Site Complex, San Diego County	1993
Case	Negative Cultural Resources Survey Report: Santa Fe Heights Development - Project, Rancho Santa Fe, San Diego County, APN 267--147-01 and APN 267-147-02	2010
Cooley and Carrico	Addendum to the Historic Properties Treatment Plan for Sites within and Adjacent to the Proposed C.W. Harris Site Archaeological District, Starwood Project Area (TM5073), Santa Fe Valley, San Diego County	2001
Cooley and Craft	Cultural Resources Inventory and Testing Report for the Vista Hills Property, Rancho Santa Fe, San Diego County	2004
Cooley and Jordan	Cultural Resources Phase I Survey and Inventory, Lusardi Creek Preserve, San Diego County	2008
Gallegos and Harris	Cultural Resource Literature Review for the North Coast Transportation Study, Arterial Streets Alternative, San Diego County	1999
Gallegos and Stropes	Cultural Resource Survey Report for the Sterling Property, Carlsbad	1997
Gallegos, Phillips and Pigniolo	A Cultural Resource Overview for the San Dieguito River Valley, San Diego	1988
Glenn	Cultural Resources Technical Report for the SA680/SF728 Opportunities and Constraints Analysis	1992
Glenn	A Cultural Resources Technical Report for the Santa Fe Valley Specific Plan EIR, San Diego County	1995
Glenn	Cultural Resources Investigations within the Starwood Project Area (TM5073), Santa Fe Valley, San Diego County	1999
Glenn and Carrico	Santa Fe Valley Specific Plan Draft Environmental Impact Report	1995
Glenn et al.	Cultural Resource Testing and Evaluation Program for the Balcor Tentative Map Area, Santa Fe Valley Specific Plan Area, San Diego County	1995
Guerrero and Gallegos	Cultural Resources Survey for the Rancho Santa Fe Parklands Project, San Diego	2003
Guerrero and Gallegos	Cultural Resources Survey for the Loma Linda Project, County of San Diego	2007
Hector and Brewster	San Dieguito River Valley Inventory of Archaeological Resources	2002
Mooney & Associates	Historic Properties Treatment Plan for Sites within and Adjacent to the Proposed C. W. Harris Site Archaeological District, Starwood Project Area (TM5073), Santa Fe Valley, San Diego County	2000
Shalom	Cultural Resources Survey Report for Zarei TPM 20976, Log No. 07-08-011 - Negative Findings, APN-267-148-16	2007
Shalom	Cultural Resources Survey Report for Levie TPM 21065, Log No. 07-08-005 - Negative Findings, APN-267-132-10-00	2007
Shalom	Cultural Resources Survey Report for Gosselin TPM 21091, Log No. 07-08-016 - Negative Findings, APN-267-148-12	2007
SRI	Archaeological/Historical/Paleontological Literature Search and Records Check on Rancho Santa Fe Community Services District Reorganization (R080-46) Plan Located in the Rancho Santa Fe Area of the County of San Diego	1981

Table 1. Archaeological Investigations within a One-Mile Radius of the Project Area (Continued)

Author	Report Title	Year
Walker et al.	A Review of Cultural Resources in the La Jolla Valley Region of San Diego	1981
Whitney-Desautels	Archaeological and Historical Literature Search and Records Check for Alternative Alignments for Highway 680, San Diego County	1991
Wright	Cultural Resources Survey Report for TPM 20975, Log No. 05-08-028 - Lang Minor Subdivision, APN-267-142-09-00	2006

Table 2. Recorded Cultural Resources within a One-Mile Radius of the Project Area

Site Trinomial	Site Type	Site Dimension	Recorder/Year
SDI-149	Temporary Camp; Bedrock Milling	13000 m^2	Carnegie 1938
SDI-317	Habitation	9120 m^2	UCLA 1958
SDI-319A-B	Lithic Scatter; Temporary Camp	20880 m^2	UCLA 1958
SDI-320	Lithic Scatter	43 x 60 m	UCLA 1958
SDI-9817	Temporary Camp	46 x 95 m	Hanna 1983
SDI-11825/H	Temporary Camp; Historic Trash Scatter	81684 m^2	Ogden 1992
SDI-12658/H	Lithic Scatter; Historic Trash Scatter	30 x 35 m	Ogden 1992
SDI-12659	Lithic Scatter	6 x 10 m	Ogden 1992
SDI-12660	Lithic Scatter	35 x 40 m	Ogden 1992
SDI-12664	Bedrock Milling	10 x 10 m	Ogden 1992
SDI-12665	Lithic Scatter	5 x 15 m	Ogden 1992
SDI-12666	Lithic Scatter	62 x 100 m	Ogden 1992
SDI-12688	Temporary Camp	30 x 60 m	Ogden 1992
SDI-13029	Quarry; Lithic Scatter	20 x 30 m	Ogden 1992
SDI-13030	Lithic Scatter	104 x 224 m	Ogden 1992
SDI-13032	Quarry	4 x 8 m	Ogden 1992
SDI-13033	Temporary Camp; Bedrock Milling	50 x 56 m	Ogden 1992
SDI-13034	Lithic Scatter	26 x 43 m	Ogden 1992
SDI-13035	Lithic Scatter; Bedrock Milling	10 x 20 m	Ogden 1992
SDI-13036	Bedrock Milling	55 x 160 m	Ogden 1992
SDI-13037/H	Habitation; Historic Trash Scatter	102 x 311 m	Ogden 1992
SDI-13038	Temporary Camp; Bedrock Milling	8.8 x 23.5 m	Ogden 1992
SDI-13039	Lithic Scatter	28 x 44 m	Ogden 1992
SDI-13040	Bedrock Milling	6 x 8 m	Ogden 1992
SDI-13041	Bedrock Milling	4 x 10 m	Ogden 1992
SDI-13042H	Historic Trash Scatter	32 x 150 m	Ogden 1992
SDI-13043	Quarry	6 x 7 m	Ogden 1992
SDI-13044	Bedrock Milling	7 x 12 m	Ogden 1992
SDI-13045	Quarry	0.3 x 0.4 m	Ogden 1992
SDI-13046	Bedrock Milling	11.8 13 m	Ogden 1992
SDI-13047	Quarry; Lithic Scatter	5 x 40 m	Ogden 1992
SDI-13048	Bedrock Milling	13 x 20 m	Ogden 1992
SDI-13049	Temporary Camp	20 x 25 m	Ogden 1992
SDI-13050	Lithic Scatter	80 x 120 m	Ogden 1992
SDI-13051	Bedrock Milling	6 x 9 m	Ogden 1992
SDI-13058	Temporary Camp	22 x 36 m	Ogden 1992
SDI-13059	Lithic Scatter	35 x 90 m	Ogden 1992
SDI-13504	Temporary Camp	20 x 20 m	Ogden 1992
SDI-13827	Lithic Scatter	3 x 15 m	Ogden 1994

1.3 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structure, and objects that possess exceptional value or qualify illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA land the San Diego County Local Register provide the guidance for making such a determination. The following sections(s) details the criteria that a resource must meet in order to be determined important.

1.3.1 California Environmental Quality Act (CEQA)

According to CEQA (§15064.5a), the term "historical resource" includes the following:

(1) A resource listed in, or determine to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR. Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code, shall be presumed to be historically of culturally significant. Public agencies must treat any such resources as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code §5024.1, Tile 14, Section 4852) including the following:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Is associated with the lives of person important in our past;
- (C) Embodies the distinctive characteristics of a type, period, region, or individual, or possesses high artistic value; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined eligible for listing the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in sections 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of an historical resource is materially impaired when a project:
   (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
   (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historical or culturally significant; or
   (C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

(1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).

(2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.a of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

(3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities to determine whether the project location contains unique archaeological resources.

(4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project o n those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted

in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 1564.5 (d) & (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(d) When an initial study identifies the existence of, or the probably likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code §5097398. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:

(1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
(2) The requirement of CEQA and the Coastal Act.

1.3.2 San Diego County Local Register of Historical Resources (Local Register)

The County requires that resource importance be assessed not only at the State level as required by CEQA, but at the local level as well. If a resource meets any one of the following criteria as outlined in the Local Register, it will be considered an important resource.

(1) Is associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
(2) Is associated with the lives of persons important to the history of San Diego County or its communities;
(3) Embodies the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
(4) Has yielded, or may be likely to yield, information important in prehistory or history.

1.3.3 San Diego County Resource Protection Ordinance (RPO)

The County of San Diego's RPO protects significant cultural resource. The RPO defines "Significant Prehistoric or Historic Sites" as follows:

Sites that provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, State, or Federal importance.

Such locations shall include, but not be limited to:

(1) Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:

(aa) Formally determined eligible or listed in the National Register of Historic Placed by the Keeper of the National Register; or

(bb) To which the Historic Resource ("H" Designator) Special Area Regulations have been applied; or

(2) One-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials; and

(3) Any location of past or current sacred religious or ceremonial observances which is either:

(aa) Protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures or,

(bb) Other formally designated and recognized sites which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

The RPO does not allow non-exempt activities or uses damaging to significant prehistoric or historic lands on properties under County jurisdiction. This includes development, trenching, grading, clearing, and grubbing, or any other activity or use damaging to significant prehistoric or historic lands. The only exempt activity is scientific investigation with an approved research design prepared by an archaeologist certified by the Register of Professional Archaeologists. All discretionary projects are required to be in conformance with applicable County standards related to cultural resources, including the noted RPO criteria on prehistoric and historic sites. Non-compliance would result in a project that is inconsistent with County standards.

2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

Determining resource importance is a two-step process. First, the cultural environment must be defined. Then the criteria for determining importance must be applied to the resource. The following subchapters provide guidance on this process and detail the cultural environment and criteria that is typically used in evaluating resources.

2.1 Defining the Cultural Environment

San Diego County has more than 27,700 recorded sites as of November 2012 and this number continues to grow. The cultural environment consists of the remains of prehistoric and historic human behaviors. When cultural resources have been identified, the cultural environment has been defined and the baseline condition set. Cultural resources include archaeological and historic sites, structures, and objects, as well as traditional cultural properties. The following is a list of components that can make up the cultural environment.

2.1.1 Building

A building is a resource, such as a house, barn, church, factory, hotel, or similar structure created principally to shelter or assist in carrying out any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn. The Somers-Linden Farmstead (Victorian), the McRae/Albright Ranch House (Victorian), the Holmgren House (Moderne), and the County Administration Center (Spanish Colonial Revival) are examples of buildings in the County of San Diego.

Special consideration should be given to moved buildings, structures, or objects, cultural resources achieving significance within the past fifty (50) years, and reconstructed buildings. Context, time, and original form are integral to historic preservation. However, it is important to recognize resources outside of the required characteristics for the history that they embody.

Moved Buildings, Structures, or Objects

The retention of historical resources on site should be encouraged and the non-historic grouping of historic buildings into parks or districts would be discouraged. However, it is recognized that moving an historic building, structure, or object is sometimes necessary to prevent its destruction, and is appropriate in some instances. An historical resource should retain its historic features and compatibility in orientation, setting, and general environment.

Cultural Resources Achieving Significance within the Past Fifty (50) Years

In order to understand the historical importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than fifty (50) years old may be considered if it can be determined that sufficient time has passed to understand its historical importance.

Reconstructed Buildings

A reconstructed building less than fifty (50) years old may be eligible if it embodies traditional building methods and techniques that play an important role in a community's historically rooted beliefs, customs, and practices. An example of a reconstructed building is an American Indian sweat lodge.

2.1.2 Site

A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possessed historical, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event, and if no buildings, structures, or objects marked it at that time. Examples of such sites are trails, designed and traditional landscapes, battlefields (San Pasqual Battlefield), homestead sites, habitation sites (Village of Pamo), American Indian ceremonial areas (Gregory Mountain), petroglyphs, pictographs, and traditional cultural places.

2.1.3 Structure

The term "structure" is used to describe a construction made for a functional purpose rather than creating human shelter. Examples of structures include mines, flumes, roads, bridges, dams, and tunnels.

2.1.4 Object

The term "object" is used to describe those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed, as opposed to a building or structure. Although it may be moveable by nature or design, an object is associated with a specific setting or environment. Objects should be in a setting appropriate to their significant historic use, role, or character. Objects that are relocated to a museum are not eligible for listing in the Local Register. Examples of objects include fountains, monuments, maritime resources, sculptures, and boundary markers.

2.1.5 Landscapes and Traditional Cultural Properties

"Landscapes" vary in size from small gardens to national parks. In character, they range from designed to vernacular, rural to urban, and agricultural to industrial. A cultural landscape is a geographic area which, because of a unique and integral relationship between the natural and cultural environments, has been used by people; shaped or modified by human activity, occupation or invention; or is infused with significant value in the belief system of a culture or society. Estate gardens, cemeteries, farms, quarries, mills, nuclear test sites, suburbs, and abandoned settlements, and prehistoric complexes, all may be considered under the broad category of cultural landscapes. Landscapes provide a distinct sense of time and place. Traditional cultural landscapes (Traditional Cultural Properties) can also consist of related archaeological and ethnographic features and places (see below for definition of a prehistoric district).

2.1.6 Prehistoric and Historic Districts

Districts are united geographic entities that contain a concentration of historic buildings, structures, objects, and/or sites united historically, culturally, or architecturally. Districts are defined by precise geographic boundaries; therefore, districts with unusual boundaries require a description of what lies immediately outside the area, in order to define the edge of the district and to explain the exclusion of adjoining areas. Camp Lockett in Campo is an example of a historic district. The Village of Pamo is an example of a prehistoric Indian rancheria that represents a traditional cultural landscape that could be a district, consisting of the places used and inhabited by a traditional culture. A traditional cultural landscape defined as a district could include a village site, related milling features, stone quarries and lithic tool process areas, ceremonial locations and landmarks, and temporary or seasonal camps. Together, these represent a traditional cultural landscape.

2.2 Criteria for the Determination of Resource Importance

A number of criteria are used in identifying significant historic/archaeological resources and are based upon the criteria for inclusion in the San Diego County Local Register. Significance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture.

The San Diego County Register was modeled after the California Register. As such, a cultural resource is determined significant if the resource is listed in, or determined to be eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, or the San Diego County Register of Historical Resources. Any resource that is significant at the National or State level is by definition significant at the local level.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources; or is not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or is not identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that a resource may be historical as defined in Public Resources Code section 5020.1(j) or 5024.1.

The following criteria must be considered when evaluating a resource's importance. The first four criteria were derived from the significance criteria found in the California Environmental Quality Act and the San Diego County Register of Historical Resources (Ordinance No.9493; San Diego County Administrative Code §396.7). The San Diego County Register is similar to both the National Register and California Register but is different in that significance is evaluated at the local level.

1. Resources associated with events that have made a significant contribution to the broad patterns of California or San Diego County's history and cultural heritage. Examples include resources associated with the Battle of San Pasqual (Mexican-American War, 1846) or gold mining in the Julian area (1870s), or a Kumeyaay settlement in the

Cuyamaca Valley. Each of these resources would be considered significant because it is associated with an event that has made a significant contribution to the broad patterns of San Diego County's history and cultural heritage.

2. Resources associated with the lives of persons important to our past, including the history of San Diego County or its communities. Resources that are associated with the life of George W. Marston (Benefactor/Merchant/Civic Leader), Kate Sessions (Horticulturalist), John D. Spreckels (Investor/Developer), Ellen Browning Scripps (Philanthropist), Ah Quin (Chinese Merchant/Labor Contractor), Manuel O. Medina (Pioneer of the Tuna Industry), Jose Manuel Polton (Hatam [Kumeyaay Captain of the Florida Canyon Village]), or Jose Pedro Panto (Kumeyaay Captain of the San Pasqual Pueblo) illustrates this criteria because this list identifies examples of individuals that are important to the history of San Diego County or its communities.

3. Resources that embody the distinctive characteristics of a type, period, region (San Diego County), or method of construction, or represents the work of an important creative individual, or possesses high artistic values. Resources representing the work of William Templeton Johnson (Architect – Balboa Park, Serra Museum), Irving Gill (Architect – Bishop's School), Lilian Rice (Rancho Santa Fe), or Hazel Waterman (Designer – Estudillo Adobe Restoration) would be considered significant because they represent the work of an important creative individual; or if a resource is identified as a Queen Anne, Mission Revival, Craftsman, Spanish Colonial, or Western Ranch Style structure, it would be significant because it embodies the distinctive characteristics of a type or period.

4. Resources that have yielded or may be likely to yield, information important in prehistory or history. Most archaeological resources contain information; however the amount of information varies from resource to resource. For example, a small lithic scatter will contain information, but it will be on a much more limited basis than that of a village or camp site. The information may be captured during initial recordation and testing of the site or may require a full data recovery program or additional treatment/mitigation. **Any site that yields information or has the potential to yield information is considered a significant site.** Most resources will be considered significant because they contain some information that contributes to our knowledge of history or prehistory. The criteria used to evaluate a single resource are the same criteria used to evaluate cumulative impacts to multiple resources outside the boundary of a project.

5. Although districts typically will fall into one of the above four categories, because they are not specifically identified, the following criterion is included which was obtained from the National Register:

   Districts are significant resources if they are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition, but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of lifeor culture. A traditional cultural landscape is an example of a prehistoric district

because individual sites must be considered within the broader context of their association with one another.

6. Resource Protection Ordinance. Cultural resources must be evaluated for both the California Environmental Quality Act as outlined in criteria 1-4 above and the Resource Protection Ordinance pursuant to Article III of the ordinance. Under the Resource Protection Ordinance, cultural resources are considered "RPO" significant if they meet the definition of a RPO "Significant Prehistoric or Historic Site", as set forth in Section 3.1 above.

7. Human remains are considered "highly sensitive" by the County. As such, human remains require special consideration and treatment. Regulations require that if human remains are discovered, the County Coroner shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains. The following criterion was included pursuant to the California Environmental Quality Act (§15064.5) and California State Code (PRC5097.98 and HSC7050.5). As such, a resource shall be considered significant if it contains any human remains interred outside of a formal cemetery. Mitigation measures will be developed on a case by case basis by the County archaeologist and the archaeological consultant. In addition, it is of the utmost importance to tribes that human remains be avoided whenever feasible.

8. Integrity is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. The evaluation of integrity is somewhat of a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its historical associations or attributes and context. Resources must retain enough of their historical character or appearance to be recognizable as historical resources and to convey the reasons for their significance. An evaluation of integrity is an essential part of determining significance for historical resources such as building, structures, and districts.

   Integrity is evaluated through the assessment of a cultural resource's attributes, and may include location, design, setting, materials, workmanship, feeling, and association. It must be judged with reference to the particular criteria under which a resource is proposed for eligibility (structural, architectural, artistic, historic location, archaeological site, historic district). Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.

   Attributes - Attributes are those distinctive features that characterize a resource. They should be evaluated and compared to other properties of its type, period, or method of construction.

   Location - Location is the place where the property was constructed or the place where the historical event occurred. The actual location of an historical property,

complemented by its setting, is particularly important in recapturing the sense of historical events and persons.

Design - Design is the combination of elements that create the historical form, plan, space, structure, and style of a property. This includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials. Design can also apply to districts and to the historical way in which the buildings, sites, or structures are related. Examples include spatial relationships between major features; visual rhythms in a streetscape or landscape plantings; the layout and materials of walkways and roads; and the relationship of other features, such as statues, water fountains, and archaeological sites.

Setting - Setting is the physical environment of an historical property. It refers to the historical character of the place in which the property played its historical role. It involves how, not just where, the property is situated and its historical relationship to surrounding features and open space. The physical features that constitute the historical setting of an historical property can be either natural or manmade and include such elements as topographical features, vegetation, simple manmade paths or fences and the relationships between buildings and other features or open spaces.

Materials - Materials are the physical elements that were present during the development period and are still present or, if materials have been replaced, the replacement(s) must have been based on the original. The property must be an actual historical resource, not a re-creation. For example, a Victorian style wood-frame dwelling that has been covered with reconstructed stucco has lost its integrity of materials. Conversely, an adobe wall that has been reconstructed with similar adobe mud, as opposed to adobe-simulate concrete, would retain its integrity of materials.

Workmanship - Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history. It is the evidence of the artisans' labor and skill in constructing or altering a building, structure, object, or site. It may be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. Examples of workmanship in historic buildings include tooling, carving, painting, graining, turning, and joinery. Examples of workmanship in precontact contexts include pottery, stone tools, basketry, rock art, bedrock milling, and stone structures.

To assess integrity one must:

(1) Define essential physical features that must be present to a high degree for a property to represent its significance;

(2) Determine whether the essential physical features are apparent enough to convey the property's significance; and

(3) Compare the property with similar properties in the locally significant theme.

A property that is significant for its historical association should retain the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s). If the property is a site where there are no material cultural remains, such as a battlefield, the setting must be intact. If the historical building associated with the event, pattern, or person no longer exists, the property has lost its historical integrity.

A property important for illustrating a particular architectural style or construction technique must retain the physical features that constitute that style or technique. A property that has lost some historical materials or details can be considered if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, pattern of windows and doors, texture of materials, and ornamentation. A property should not be considered if it retains some basic features conveying massing, but has lost the majority of the features that once characterized its style. Normally changes to a structure that are reversible will not affect integrity because they will be less than significant.

Properties being considered for the first five criteria above must not only retain the essential physical features, but the features must be visible enough to convey their significance and historical identity. This means that even if a property is physically intact, its integrity is questionable if its significant features are concealed under modern construction. Archaeological properties are the exception to this – by nature they may not require visible features to convey their significance.

Note: Unless a resource is determined to be "not significant" based on the above criteria, it will be considered a significant resource. If it is agreed to forego significance testing on cultural sites, the sites will be treated as significant resources and must be preserved through project design. In addition, a treatment plan must be prepared that will include preservation of cultural resources.

3.0 RESEARCH DESIGN

3.1 Survey Research Design

The goal of this study is to identify any cultural resources located within the project area so that the effects of the project on these resources can be assessed. To accomplish this goal, background information was examined and assessed, and a field survey was conducted to identify cultural remains. Based on the records search and historic map check, cultural resources possibly present within the project could include those of both historic and prehistoric age. Prehistoric cultural resources could include bedrock milling and stone tool reduction material associated with Santiago Peak Volcanic lithic resources.

3.2 Testing Research Design

The goal of the testing program was to assess the potential effects of the project on site CA-SDI-20780. To accomplish this goal, background information was examined and assessed, and a testing program was conducted to identify the extent and integrity of the site.

3.3 Integrity

Resource integrity is a critical part of evaluation. For archaeological purposes, integrity usually refers to the preservation of artifact associations and stratigraphy. Bioturbation and other natural factors affecting artifact associations are common in the San Diego region, and much of the region area has also been affected by agriculture and urban development.

3.4 Native American Heritage Concerns

Native American heritage concerns need to be included in significance evaluations as part of State and County policy. Native American concerns particularly focus on religious sites, sites that contain human remains, and sites with items used for religious purposes.

3.5 Research Potential

Research potential is the most applicable of the California Register criteria for archaeological resources. To establish a framework to evaluate if a site may be likely to yield information important in prehistory or history, important research questions are established along with data needs. These research criteria are established below.

3.6 Theoretical Orientation

As a social science, archaeology seeks to understand human behavior. Because of the nature of the archaeological record, archaeologists look at behavior in terms of cultural patterns, and environmentally oriented archaeologists attempt to explain these patterns in the context of various and changing natural and social environments. While much of the past archaeological research in San Diego County has focused on reconstructing culture change over time or "culture history," new theoretical ideas in the 1960s and 1970s highlighted the importance of the environment and shifted the emphasis of archaeology from reconstructing history to understanding culture (Binford 1989).

The fundamental theoretical orientation that underlies this study, and much of the work that has been conducted in San Diego County to date is cultural materialism. "Cultural materialism" as used here essentially holds that practical, survival, and economic aspects of culture ultimately determine the success or the spread of specific behavior patterns (Hayden 1993). Cultural ecology and environmental archaeology are forms of cultural materialism, emphasizing the role of the environment as a practical controlling factor on culture and human behavior. The perspectives of cultural materialism and cultural ecology are appropriate for the study area because of the direct relationship between hunter-gatherer economy and the environment and because these concepts represent a continuation of recent thinking in the region. Cultural materialism is also appropriate for study of the historical archaeological resources because it focuses on relationships within systems.

3.7 Research Topics, Implications, and Data Requirements

3.7.1 Prehistoric Subsistence

Reconstructing the subsistence economy of prehistoric hunter-gatherers is a key question for cultural ecology. Historic period hunter-gatherers typically occupied extreme environments and/or had been heavily impacted by European colonial expansion. As a consequence, understanding the cultural adaptations of hunter-gatherers in more productive environments is heavily reliant on archaeological data.

For the most part, subsistence during the Late Prehistoric in San Diego County is fairly well understood through the ethnographic record. Ethnographic information has provided a level of detail beyond the archaeological record, but certain aspects are poorly known.

Based on the presence of bedrock milling features at site CA-SDI-20780, it is likely that subsistence was focused on inland terrestrial resources. The site is located well beyond the 10-kilometer coastal foraging radius suggested by Jones (1992).

•How does site subsistence pattern relate to resource availability?

Hypothesis: The general pattern is one of using available resources: Acorn processing subsistence technologies and small mammal procurement should dominate the assemblage. Marine resources, if present, will represent a minimal component of the assemblage.

Data Needs:

•Stratigraphic contexts that indicate the sites contain interpretable cultural strata that can be taken to represent the results of relatively short-term occupations or a single occupation that can be compared to other single occupation sites.

•Material suitable for establishing chronology from these contexts.

•Vertebrate and invertebrate faunal material, along with tools that reflect subsistence focus and activities such as projectile points, bifaces, and milling tools.

•Sufficient quantities of ecofactual material to allow patterns to be defined. To obtain a statistically valid sample, quantities of 50 items per m^3 are required.

3.7.2 Prehistoric Chronology

Chronology and aspects of culture history have long been the subjects of archaeological research in the San Diego region. Late Prehistoric period sites are common in the region, and are relatively easily identified through the presence of bedrock milling, ceramics, and bow and arrow technology. Early Archaic period sites are more difficult to recognize and perhaps less common in the area. Furthermore, while Archaic period sites have been scrutinized in coastal regions, few have been studied in depth in inland areas.

•Is the Archaic period represented at site CA-SDI-20780 and if so, how does this component compare to Late Prehistoric assemblages at the same location?

Hypothesis: Due to the bedrock milling associated with this prehistoric site, it is unlikely the site represents Paleoindian occupation. If present, Archaic Period evidence will be represented by dart points, differences in lithic material selection and reduction technology, and flaked lithic tool types.

Data Needs:

•Stratigraphic contexts that indicate the sites contain interpretable cultural strata that can be taken to represent the results of relatively short-term occupations or a single occupation that can be compared to other single occupation sites.

•Material suitable for radiocarbon dating from these contexts.

•Biface tools and artifacts representative of activities carried out at the site. To obtain a statistically valid sample, quantities of 50 items per m^3 are required.

3.7.3 Prehistoric Mobility and Settlement

Settlement Patterns have been the subject of considerable research in San Diego County. This topic contributes to the definition of settlement systems and the study of their change through time, both elements important to local prehistoric studies. The interaction of cultural groups and the natural landscape is an important aspect of human behavior. Just as cultural geographers study current land use patterns to aid in urban planning, the study of prehistoric settlement patterns can provide insight into past strategies of interaction with the environment.

Most settlement pattern studies focus on the relationship between natural resources and areas of human occupation. A general assumption is that important resources for subsistence create a draw for settlement, and that people will tend to locate near important water and food resources. Other types of sites may also be located near resources, but may not be related to habitation. These special task sites, such as isolated bedrock milling stations and lithic procurement/reduction areas, also provide important evidence on how people used the natural landscape.

An examination of resources used at a site and their source provenience is a means of examining mobility. Direct procurement, or travel over relatively large distances to procure resources is one aspect of mobility. Another aspect relates to territoriality. A seasonal round type of mobility strategy with bipolar village locations is often the model for Late Prehistoric mobility.

•How does CA-SDI-20780 fit into the regional settlement system through time?

Hypothesis: Site patterning in relation to water, landform, and lithic resources is expected. Exchange played a very minor role in resource procurement and, although mobility provided a range of available resources at different time intervals, the sites reflect foraging and processing behavior and the local resources of the area. Roughly 90% of the assemblage will represent local materials within a 10-km foraging radius.

Data Needs:

•Stratigraphic contexts that indicate the sites contain interpretable cultural strata that can be taken to represent the results of relatively short-term occupations or a single occupation that can be compared to other single occupation sites.

•Material suitable for chronological control from these contexts.

•Artifacts representative of activities carried out at the sites. To obtain a statistically valid sample, quantities of 50 items per m^3 are required.

•Sufficient quantities of source specific lithic material to allow patterns to be defined. To obtain a statistically valid sample, quantities of 50 items per m^3 are required.

4.0 ANALYSIS OF PROJECT EFFECTS

The goal of this study is to identify and test any cultural resources located within the project area so that the effects of the project impacts could be assessed. To accomplish this goal, background information was examined and assessed, a field survey was conducted to identify cultural resources, and a testing program was completed to assess the integrity and content of the site. Based on the records search and historic map check, the cultural resources within the project are prehistoric resources. Previously recorded prehistoric cultural resources included two milling features associated with the bedrock boulders in the area.

The records and literature search for the project was conducted at the South Coastal Information Center of the California Archaeological Inventory at San Diego State University. This records search included site records and reports for the project area and a one-mile radius of the project along with information on potential historic resources.

In addition to the background research and survey, a testing program was conducted to evaluate the extent of cultural resources within the project area and recover data from these resources. The methods and results of these studies are described below.

4.1 Methods

4.1.1 Survey Methods

The survey of the project area was conducted on November 29, 2012 by Mr. Andrew R. Pigniolo, RPA. Mr. Justin Linton of Red Tail Monitoring & Research, Inc. served as Native American Monitor. The project was surveyed on foot in 10 to 15 m transect intervals. The project area has coastal sage scrub vegetation, but also includes non-native grasses and chamise chaparral. Portions of the project have been grazed with approximately 90 percent visibility while other portions of the project had approximately 60 percent visibility. Surface visibility averaged approximately 75 percent over most of the property, but rodent burrows and other clearings provided visibility in grass covered areas. The cultural resources survey of the project adequately served to identify cultural resources.

Cultural resources identified during the survey were recorded on State of California, Department of Parks and Recreation forms and are included in Appendix D.

4.1.2 Test Methods

The goal of the testing and evaluation program was to assess the integrity and content of prehistoric site CA-SDI-20780 within the project area. Testing at CA-SDI-20780 included site mapping, bedrock milling recordation, and subsurface excavation to determine if a subsurface component is present.

Mr. Andrew R. Pigniolo and Mr. Pepe Aguilar conducted the testing program on March 26, 2013. Mr. Bobo Linton of Red Tail Monitoring & Research, Inc. served as Native American Monitor. During the inventory phase, the site was initially surveyed using 10-15 m parallel

transects. The testing and evaluation phase began with a re-survey of the site area using 2-3 m interval parallel transects. No surface artifacts were identified.

Bedrock milling features were drawn and measured during the recordation process. A State of California, Department of Parks and Recreation form was filled out for the features and all milling elements were measured and described. Bedrock milling forms are included with the site form update in Appendix D.

A total of five shovel test pits (STPs) were excavated at CA-SDI-20780 to determine if a subsurface deposit was present and to establish the boundary of the site. STPs were set out in cardinal directions across the site area. STPs were manually excavated, circular test pits measuring 30-cm in diameter. STPs were excavated in 10-cm arbitrary, contour levels. The goal of STP placement was to test the areas within the site most likely to contain subsurface artifacts. All excavated soil was passed through 1/8-inch mesh hardware cloth and dry-screened in the field. The STP data indicated there was no subsurface deposit at CA-SDI-20780.

4.1.3 Curation

Photographs and project records for this inventory will be temporarily curated at Laguna Mountain until final curation arrangements can be made at the San Diego Archaeological Center or another appropriate regional repository.

4.1.4 Native American Participation

Native American involvement in the project included contacting Red Tail Monitoring and Research, Inc. who provided Mr. Justin Linton as the Native American Monitor. Mr. Linton participated in the field survey. Mr. Bobo Linton, also of Red Tail Monitoring & Research, served as Native American Monitor during the testing phase.

County staff initiated a Sacred Lands check with the California Native American Heritage Commission (NAHC). County staff contacted the Native American groups and individuals provided by the NAHC to further investigate if they had knowledge of Sacred Lands occurring within the project area. No responses have been received.

4.2 Survey Results

One archaeological site was identified within the project area (Figure 4). Site CA-SDI-20780 consists of a small bedrock milling station with no associated surface artifacts. The site is located on a gentle south-facing slope of a ridge in an area of mima mounds in a fenced horse corral. It is north of Artesian Road, approximately 50 m west of the property line and 100 m west of a large residence located off property. The site covers an approximately 3 m north/south by 2 m east/west area and includes two small bedrock milling features each with a single slick (Figure 5). Feature A measures 90 cm north/south by 63 cm east/west and 30 cm high. It contains one slick on a high area on a coarse-grained Santiago Peak Volcanic boulder.

Figure 4

Project Location and Associated Cultural Resource

(Confidential figure located in Appendix E)

a. Overview of CA-SDI-20780, view to north-northeast; Feature A is the larger boulder left of center; Feature B is small one in foreground (PR-03946-016)

b. Close-up of CA-SDI-20780, view to north; Feature B in foreground and Feature A in background (PR-03946-017)

Figure 5
CA-SDI-20780 Overview Photographs

Feature B measures 43 cm north/south by 21 cm east/west and is 5 cm tall. It consists of a small granitic boulder with one slick element in a natural depression. No surface artifacts were observed and a subsurface deposit is unlikely based on the shallow soils in the area. Site integrity is good, although rocks nearby show some evidence of past mechanical brushing, but the soil and topography of the area appear undisturbed. Site soil is loamy sand on a ridge slope with a southern exposure and slope of approximately 4 degrees.

4.3 Test Results

The cultural resource survey identified one prehistoric cultural resource, CA-SDI-20780, within the project APE. The cultural resource consists of two milling features. The current project design would impact this site. Under the California Environmental Quality Act (CEQA), the County Resource Protection Ordinance (RPO), and the 2007 County of San Diego Guidelines, proposed impacts to significant cultural resources need to be considered in the planning process. The 2007 County Guidelines treat all archaeological sites with integrity as having the potential to yield information and as a significant, and therefore mitigation is required. The purpose of the testing program is to determine if the site retains integrity and if additional cultural materials in the form of subsurface components are present. Because this site will be both directly and indirectly impacted, the testing of this resource was required to determine whether the site has integrity and whether additional data recovery would be necessary. The testing of this resource is described in detail below.

Site CA-SDI-20780 is a bedrock milling station with two milling features (Figure 6). It is located in the central portion of the northern project area on a relatively flat area of a larger ridge. During testing no subsurface artifacts were recovered.

Structure and Soils

Site CA-SDI-20780 appears to represent a small seed processing station with two milling features with no subsurface artifacts. The site is slightly disturbed by past brushing and grazing activity. Soils throughout the area were generally a light to medium brown loamy sand. The surface of the STPs was generally covered by non-native herbs and grasses. The 0-10 cm level of the STPs was dominated by light brown sandy silt with clay. This was generally underlain by reddish brown sandy clay with cobbles. The clay appears to be the result of in-situ weathering of sediments. Some of the cobbles were large enough to obstruct the excavation of the STPs. The upper 10 cm in STP 5S/0W had light brown sandy loam over the same soil sequence as the other STPs. This appeared to be the result of an accumulation of local sheetwash. No artifacts were recovered during the excavation of the STPs.

Testing Results

Testing of CA-SDI-20780 included the excavation of five STPs and the mapping and recording of the two milling features. The milling features consist of low profile volcanic and granitic small boulders with slicks (Table 3).

Figure 6

Site Map

(Confidential figure located in Appendix E)

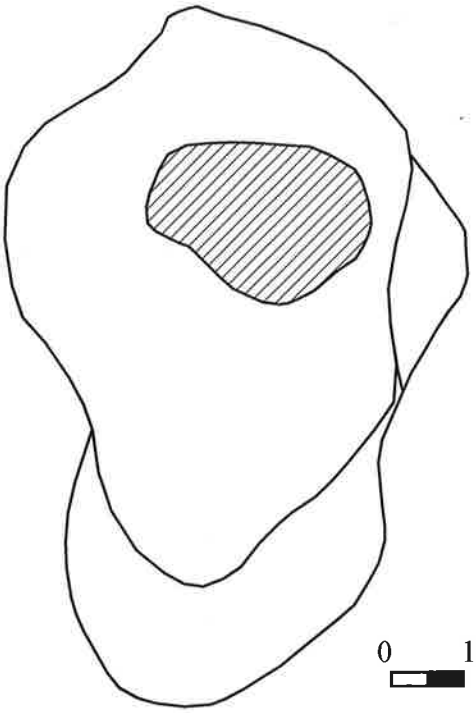
Table 3. Summary of CA-SDI-18923 Bedrock Milling Features

Feature	Elements	Comments
A	1 Slick	Only a small portion of the rock surface is ground
B	1 Slick	In natural depression in the rock
Total	2 Slicks	

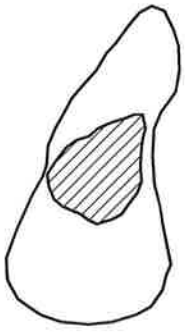
Milling Feature A (Figure 7) is a small, low profile boulder with one milling slick. The boulder is moderately weathered and covered with lichen. The slick is well-used and distinguishable from the natural rounding of the rock surface.

Milling Feature B (see Figure 7) is a large cobble with one slick. This milling element is located within a naturally formed depression on the boulder. The slick appears to have only been moderately used, but is distinguishable from the natural rounding of the rock.

A total of five STPs were excavated at CA-SDI-20780. STP placement was based on the location of the bedrock milling features. The STPs were placed in a series of north/south and east/west lines to test the boundaries of the site. STPs were generally excavated to depth of 30 cm. None of the STPs tested positive, indicating there are no subsurface deposit present at the site.



Feature A



Feature B

= Slick Area

N

Figure 7
Milling Features

Laguna Mountain Environmental, Inc.

5.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

5.1 Resource Importance

The goal of the project was to identify resources that may be impacted by the project. The cultural resource survey identified one cultural resource (CA-SDI-20780) within the project area. Site CA-SDI-20780 consists of a small bedrock milling station with no associated surface artifacts. This site has been evaluated for the California Register of Historical Resources (California Register) eligibility, significance under RPO and the County's Guidelines for Determining Significance.

Under County Guidelines, site CA-SDI-20780 qualifies as important because it retains integrity and has archaeological information potential.

5.2 Impact Identification

Project impacts include grading for house pads, roads, and excavation for utility placement. Site CA-SDI-20780 will be directly impacted by the proposed project grading pad within Parcel 3 (Figure 8).

The absence of alluvial soils that would obscure or bury cultural deposits indicates that grading impacts to undiscovered buried historic and prehistoric cultural resources would not result from grading or construction excavation for improvements.

Figure 8

Proposed Impacts and Associated Cultural Resource

(Confidential figure located in Appendix E)

6.0 MANAGEMENT CONSIDERATIONS, MITIGATION MEASURES, AND DESIGN CONSIDERATIONS

The goal of the project was to identify and evaluate resources that may be impacted by the project. The cultural resource survey resulted in the identification of one small site within the project area. CA-SDI-20780 is not recommended as eligible for nomination to the California Register, significant under the County RPO. CA-SDI-20780 is important under County Significance Guidelines.

6.1 Mitigable Impacts

Archaeological site CA-SDI-20780 will be directly impacted by the proposed project. The site cannot be avoided and incorporated into an open-space easement. CA-SDI-20780 is not recommended as eligible for nomination to the California Register or the County RPO. Documentation of the bedrock milling during testing has established the absence of subsurface artifacts, and has resulted in the information from the site being recovered. Due to the absence of surface artifacts and a subsurface deposit, testing and documentation of CA-SDI-20780 has recovered the information that makes this resource important under County Guidelines. CA-SDI-20780 is not recommended as eligible for nomination to the California Register or the County RPO. Documentation and curation of the cultural information from the site will result in the preservation of the material that made the site important under County Guidelines.

The absence of alluvial soils that would obscure or bury cultural deposits indicates that grading monitoring is not necessary.

6.2 No Significant Adverse Effects

No significant adverse effects to cultural resources will result from project impacts.

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8.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

8.1 List of Preparers

Laguna Mountain Environmental, Inc.
Andrew R. Pigniolo, RPA,

8.2 List of Persons and Organizations Contacted

South Coastal Information Center (SCIC)
Jaime Lennox, Coordinator

Redtail Monitoring and Research
Clinton Linton

Laguna Mountain Environmental, Inc - Archival Maps and Records

9.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS

Mitigation Measures	Design Considerations
None	None

APPENDICES

- **A. Resume of Principal Investigator**
- **B. Photos and Photo Logs**
- **C. Records Search Confirmation**
- **D. Site Record** (In Confidential Appendix)
- **E. Confidential Figures** (In Confidential Appendix)

APPENDIX A

RESUME OF PRINCIPAL INVESTIGATOR

ANDREW R. PIGNIOLO, M.A., RPA

Principal Archaeologist
Laguna Mountain Environmental, Inc.

Education

San Diego State University, Master of Arts, Anthropology, 1992
San Diego State University, Bachelor of Arts, Anthropology, 1985

Professional Experience

2002-Present	Principal Archaeologist/President, Laguna Mountain Environmental, Inc., San Diego
1997-2002	Senior Archaeologist, Tierra Environmental Services, San Diego
1994-1997	Senior Archaeologist, KEA Environmental, Inc., San Diego
1985-1994	Project Archaeologist/Senior Archaeologist, Ogden Environmental and Energy Services, San Diego
1982-1985	Reports Archivist, Cultural Resource Management Center (now the South Coastal Information Center), San Diego State University
1980-1985	Archaeological Consultant, San Diego, California

Professional Affiliations

Register of Professional Archaeologists (RPA; formerly called SOPA), 1992-present
Qualified Archaeology Consultant, San Diego County
Qualified Archaeology Consultant, City of San Diego
Qualified Archaeology Consultant, City of Chula Vista
Qualified Archaeology Consultant, Riverside County
Society for American Archaeology
Society for California Archaeology

Qualifications

Mr. Andrew Pigniolo is a certified archaeology consultant for the County and City of San Diego. He has received 40 hour HAZWOPPER training and holds an active card for hazardous material work. Mr. Pigniolo has more than 30 years of experience as an archaeologist, and has conducted more than 700 projects throughout southern California and western Arizona. His archaeological investigations have been conducted for a wide variety of development and resource management projects including military installations, geothermal power projects, water resource facilities, transportation projects, commercial and residential developments, and projects involving Indian Reservation lands. Mr. Pigniolo has conducted the complete range of technical studies including archaeological overviews and management plans, ethnographic studies, archaeological surveys, test excavations, historical research, evaluations of significance for National Register eligibility, data recovery programs, and monitoring projects.

REPRESENTATIVE PROJECTS

Centinela Solar Project, Imperial County, California *(KP Environmental, Inc.)* Mr. Pigniolo served as the Principal Investigator for a cultural resource survey of more than 240 acres of agricultural land near Mt. Signal, California. The survey was conducted in multiple phases based on crop conditions and surface visibility within various parcels. The project included surveys of highly impacted agricultural lands. Historic-age agricultural features were identified within several parcels. Cultural resources within the proposed project area were recorded during the survey and recommendations for impact avoidance were made. This project was conducted under both Federal and State environmental requirements.

Princess Street Monitoring and Data Recovery Project at the Spindrift Site *(City of San Diego)*. Mr. Pigniolo served as a Principal Investigator of an archaeological monitoring and data recovery program at the Spindrift Site in the community of La Jolla in the City of San Diego. The effort was initially to provide archaeological monitoring of a utility undergrounding project. The presence of the major prehistoric village site within the project alignment quickly became evident prior to construction monitoring and a data recovery plan was prepared prior to the start of work. Monitoring was conducted until the site was encountered. The data recovery plan was immediately implemented, so that data recovery could progress while construction excavation continued on other portions of the project. Data recovery included the excavation of 25 controlled units and the water screening of 100 percent of the archaeological site material impacted during trenching. More than 40 fragmented human burials were encountered. Working with Native American monitors and representatives, the remains were repatriated.

Hill Street Undergrounding Project, Point Loma, California *(City of San Diego).* Mr. Pigniolo served as Principal Investigator of an archaeological monitoring project of utility undergrounding in the community of Point Loma. The project was located in an urban environment under city streets. Archaeological monitoring identified two prehistoric sites with high levels of integrity. Testing included the excavation of four units to evaluate the significance of these resources and mitigate project effects. A hearth feature, shell and a variety of prehistoric artifacts were recovered and additional impacts to the sites were avoided by reducing trench depth.

Center City Development Corporation Area 1 Utility Undergrounding Project, San Diego, California (*City of San Diego*). Mr. Pigniolo served as Principal Investigator of an archaeological monitoring project including the undergrounding of residential and commercial utilities in the community of Logan Heights in San Diego. The project was conducted under CEQA and City of San Diego guidelines. Historic streetcar lines were encountered along with sparse historic trash deposit, but adverse impacts did not occur and no further work was recommended.

Mission Hills Sever Group 664 Project *(Lamprides Environmental Organization)* Mr. Pigniolo was the Principal Investigator for an archaeological monitoring project for a sewer line replacement in the community of Mission Hills in the City of San Diego. The project included archaeological construction monitoring in an urban environment. The project was located near the Old Town area of San Diego, but steep slopes and previous pipelines in the area resulted in an absence of cultural materials encountered.

City of San Diego Sever Group 783 Project, San Diego, California *(Orion Construction Company)* Mr. Pigniolo was the Principal Investigator for an archaeological monitoring project for a sewer line replacement in the eastern portion of the City of San Diego. The project included archaeological construction monitoring in an urban environment. Shallow soils and previous pipeline disturbance in the area resulted in an absence of cultural materials encountered (2006-2007)

All American 105 Race Project, West Mesa, Imperial County, California *(Legacy 106, Inc.)* Mr. Pigniolo served as Principal Investigator, report author, and crew chief for an archaeological survey for a proposed off-road vehicle race course in the West Mesa area of Imperial County. The survey covered Bureau of Land Management (BLM) lands and included close coordination with BLM staff. The survey included a proposed 7.5 mile course with a very short time-frame. The goal was project alignment adjustment and realignment to avoid resource impacts where possible. A variety of prehistoric cultural resources including 10 sites and 7 isolates were encountered. Human remains were identified and avoided. The race route was realigned to avoid significant resource impacts allowing the race to proceed on schedule.

Victoria Loop Road Survey, Alpine, San Diego County, California (*Alpine Fire Safe Council*) Mr. Pigniolo served as Principal Investigator of an 85-acre cultural resource survey in the Alpine area of San Diego County. The survey identified six cultural resources within the project area including prehistoric lithic scatters, an historic well, and historic artifact scatters. All resources were flagged and marked for avoidance during the vegetation treatment program. The Bureau of Land Management served as Federal Lead Agency for the project.

Spirit of Joy Church Project Testing Program, Ramona, San Diego County, California (*Spirit of Joy Lutheran Church*) Mr. Pigniolo served as Principal Investigator and Project Manager a cultural resource testing program at site CA-SDI-17299. The site was a sparse temporary camp. The project included surface collection and subsurface testing. Subsurface deposits were not identified within the project area and the site material was recovered during testing. Construction monitoring was recommended to address alluvial soils within other portions of the project area.

Alpine Fire Safe Council Brush Management Monitoring Project, Alpine Region, San Diego County, California (*Alpine Fire Safe Council*) Mr. Pigniolo served as Principal Investigator for a cultural resources monitoring and protection program on four project areas surrounding Alpine, California. Cultural resources identified during previous surveys within the vegetation treatment areas were flagged for avoidance. The project included hand clearing and chaparral mastication near residential structures to create a fire buffer zone. Vegetation removal was monitored to ensure cultural resources obscured by heavy vegetation were not impacted by the project and that all recorded cultural resources were avoided. The Bureau of Land Management served as Lead Agency for the project.

APPENDIX B

PHOTOS AND PHOTO LOG

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH RECORD

Primary #: _____
HRI #: _____
Trinomial: _____

Resource Name or #: BG-S-1

Year: 2011

Camera Format: Fuji
Film Type and Speed: Digital

Lens Size: N/A
Negatives Kept at: Laguna Mountain Environmental

Mo.	Day	Time	Frame	Subject/Description	View Toward	Accession #
11	29	09:00	1	Overview Bagley Survey Northern Parcels	N	PR-03946-001
11	29	09:00	2	Overview Bagley Survey Northern Parcels	N	PR-03946-002
11	29	09:00	3	Overview Bagley Survey Central Parcel	SE	PR-03946-003
11	29	09:15	4	Overview Bagley Survey Northern Parcels Mima Mound Topography	W	PR-03946-004
11	29	09:15	5	Overview Bagley Survey Northern Parcels Mima Mound Topography	W	PR-03946-005
11	29	09:15	6	Overview Bagley Survey Northern Parcels Mima Mound Topography and Vegetation	W	PR-03946-006
11	29	09:30	7	Overview Bagley Survey Northern Parcels Mima Mound Topography and Vegetation	SW	PR-03946-007
11	29	09:30	8	Overview Bagley Survey Northern Parcels Mima Mound Topography and Vegetation	SW	PR-03946-008
11	29	10:00	9	Overview Bagley Survey Northern Parcels Cut Slope on North End	E	PR-03946-009
11	29	10:00	10	Regional Overview	N	PR-03946-010
11	29	10:00	11	Regional Overview	NW	PR-03946-011
11	29	10:00	12	BG-S-1 Feature A	-	PR-03946-012
11	29	10:00	13	BG-S-1 Feature A	-	PR-03946-013
11	29	10:00	14	BG-S-1 Feature B	-	PR-03946-014
11	29	10:00	15	BG-S-1 Overview with Justin Linton at Feature A	NE	PR-03946-015
11	29	10:00	16	BG-S-1 Overview	NE	PR-03946-016
11	29	10:00	17	BG-S-1 Overview	N	PR-03946-017
11	29	10:00	18	BG-S-1 Overview	WNW	PR-03946-018
11	29	10:30	19	Overview Bagley Survey Southern Parcel	SE	PR-03946-019
11	29	10:30	20	Overview Bagley Survey Southern Parcel	NW	PR-03946-020

Required information is bold

PR-03946-001.jpg

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PR-03946-019.jpg

PR-03946-020.jpg

State of California ç The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH RECORD

Primary #
HRI#
Trinomial CA-SDI-20780

Page 1 **of** 1 **Resource Name or #:** Bagley L-Grade Test **Year 2013**

Camera Format: Fuji
Film Type and Speed: Digital
Lens Size:
Images Kept at: Laguna Mountain Environmental, Inc.

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
3	26	730	1	CA-SDI-20780 Overview With STP Locations	ENE	PR-04132-001
3	26	730	2	CA-SDI-20780 Overview With STP Locations	NE	PR-04132-002
3	26	745	3	CA-SDI-20780 STP 0N/0W 0-10 cm	(down)	PR-04132-003
3	26	800	4	CA-SDI-20780 STP 0N/0W 10-20 cm	(down)	PR-04132-004
3	26	800	5	CA-SDI-20780 STP 0N/0W 20-30 cm (blurry)	(down)	PR-04132-005
3	26	800	6	CA-SDI-20780 STP 0N/0W 20-30 cm	(down)	PR-04132-006
3	26	830	7	CA-SDI-20780 STP 0N/5W 0-10 cm with Rock	(down)	PR-04132-007
3	26	900	8	CA-SDI-20780 STP 5S/0W 0-30 cm	(down)	PR-04132-008
3	26	915	9	CA-SDI-20780 STP 0N/5E 0-10 cm	(down)	PR-04132-009
3	26	930	10	CA-SDI-20780 STP 5N/0E 0-30 cm	(down)	PR-04132-010
3	26	945	11	CA-SDI-20780 STP 0N/5E 0-20 cm with Rock	(down)	PR-04132-011

PR-04132-001.jpg

PR-04132-002.jpg

PR-04132-003.jpg

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PR-04132-008.jpg

PR-04132-009.jpg

PR-04132-010.jpg

APPENDIX C

RECORDS SEARCH CONFIRMATION

South Coastal Information Center
4283 El Cajon Blvd., Suite 250
San Diego, CA 92105
Office: (619) 594-5682
Fax: (619) 594-4483
sclc@mail.sdsu.edu
scic_gis@mail.sdsu.edu

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM
CLIENT IN-HOUSE RECORDS SEARCH

Company: Laguna Mountain Environmental, Inc

Company Representative: Andrew R. Pigniolo

Date: 11/20/2012

Project Identification: TPM 17341 and Grading Plan L-15684 Project

Search Radius: within designated boundaries

Historical Resources: SELF

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: SELF

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: SELF

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: SELF

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Copies: 4

Hours: 1

This is not an invoice. Please pay from the monthly billing statement

APPENDIX D

SITE RECORD

(Confidential – Bound Separately)

APPENDIX E

CONFIDENTIAL FIGURES

(Bound Separately)